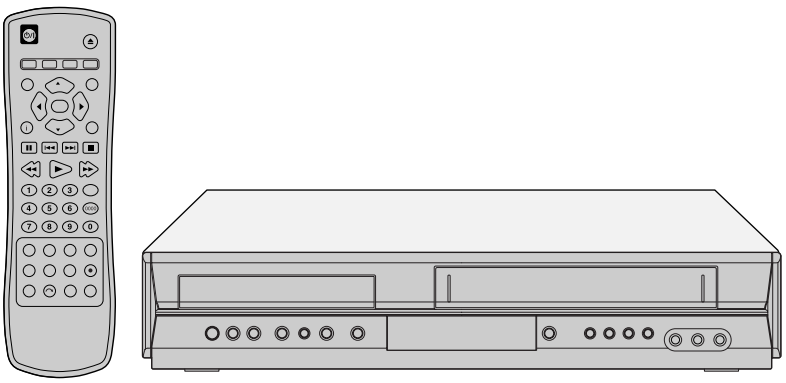
JVC

DVD PLAYER &
VIDEO CASSETTE RECORDER

HR-XV28S



PAL

ShowView™

INSTRUCTIONS

LPT1056-001A

EN

Safety Precautions

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOTREMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING: Do not install this equipment in a confined space such as a book case or similar unit.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT
CLASSE 1 PRODUIT LASER

CAUTION:
This Digital Video Disc Player employs a Laser System.
To ensure proper use of this product, please read this owner's manual carefully and retain for future reference, should the unit require maintenance, contact an authorized service location see service procedure.
Use of controls, adjustments or the performance of procedures other than those specified herein may result in hazardous radiation exposure.
To prevent direct exposure to laser beam, do not try to open the enclosure. Visible laser radiation when open. DO NOT STARE INTO BEAM.

CAUTION: VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED.

CAUTION: The apparatus shall not be exposed to water, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

CE

This product is manufactured to comply with the radio interference requirements of EEC DIRECTIVE 89/336/EEC, 93/68/EEC and 73/23/EEC.

SHOWVIEW™

SHOWVIEW is a trademark of Gemstar Development Corporation. The SHOWVIEW system is manufactured under license from Gemstar Development Corporation.

Notes on copyrights:
It is forbidden by law to copy, broadcast, show, broadcast via cable, play in public, or rent copyright material without permission.
This product features the copy protection function developed by Macrovision. Copy protection signals are recorded on some discs.
This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

SERIALNUMBER: The serial number is found on the back of this unit. This number is unique to this unit and not available to others. You should record requested information here and retain this guide as a permanent record of your purchase.

Model No. _____

Serial No. _____

CAUTION: When you are not using the unit for a long period of time, it is recommended that you disconnect the power cord from the mains outlet.

The STANDBY/ON ⏻/I button does not completely shut off mains power from the unit, but switches operating current on and off. "⏻" shows electrical power standby and "I" shows ON.

Important notes on controlling this unit

This unit uses one set of controls to operate both DVD and VCR. The following buttons are helpful in successfully controlling each part.

1. **⏻/I Button**
   Press the ⏻/I button on the remote control or front panel to turn on this unit.
2. **DVD Button**
   Press DVD button on the remote control when you want to control the DVD.
   The DVD indicator will light on the front panel display to show that the DVD is selected.
3. **VCR Button**
   Press the VCR button on the remote control when you want to control the VCR.
   The VCR indicator will light on the front panel display to show that the VCR is selected.
4. **DVD/VCR Button**
   Press the DVD/VCR button on the front panel to toggle control between the DVD and the VCR.

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About the symbols for instructions

⚠ Indicates hazards likely to cause harm to the unit itself or other material damage.

Note: Indicates special operating features of this unit.

Tip: Indicates tips and hints for making the task easier.

Playable Discs

DVD VIDEO	DVD (8 cm / 12 cm disc)
COMPACT disc SUPER VIDEO / COMPACT disc DIGITAL VIDEO	Video CD (VCD) (8 cm / 12 cm disc)
COMPACT disc DIGITAL AUDIO	Audio CD (8 cm / 12 cm disc)

In addition, this unit can play SVCD, DVD±R/RW and CD-R/RW that contains audio titles, MP3 or JPEG files.

Notes:

- Depending on the conditions of the recording equipment or the CD-R/RW (or DVD±R/RW) disc itself, some CD-R/RW (or DVD±R/RW) discs cannot be played on the unit.
- Do not attach any seal or label to either side (the labeled side or the recorded side) of a disc.
- Do not use irregular shaped CDs (e.g., heart-shaped or octagonal). It may result in malfunctions.

Notes on DVDs and Video CDs

Some playback operations of DVDs and Video CDs may be intentionally programmed by software manufacturers. This unit plays DVDs and Video CDs according to disc content designed by the software manufacturer, therefore some playback features may not be available or other functions may be added.

Regional code of the DVD player and DVDs

This DVD player is designed and manufactured for playback of region “2” encoded DVD software. The region code on the labels of some DVD discs indicates which type of player can play those discs. This unit can play only DVD discs labeled “2” or “ALL”. If you try to play any other discs, the message “Check Regional Code” will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

Disc-related terms

Title (DVD only)

The main film content or accompanying feature content or additional feature content, or music album. Each title is assigned a title reference number enabling you to locate it easily.

Chapter (DVD only)

Sections of a picture or a musical piece that are smaller than titles. A title is composed of one or several chapters. Each chapter is assigned a chapter number, enable you to locate the chapter you want. Depending on the disc, chapters may not be recorded.

Track (Video CD and audio CD only)

Sections of a picture or a musical piece on a video CD or an audio CD. Each track is assigned a track number, enabling you to locate the track you want.

Scene

On a video CD with PBC (Playback control) functions, moving pictures and still pictures are divided into sections called “Scenes”. Each scene is displayed in the menu screen and assigned a scene number, enabling you to locate the scene you want.
A scene is composed of one or several tracks.

Types of video CDs

There are two types of video CDs:

Video CDs equipped with PBC (Version 2.0)

PBC (Playback control) functions allow you to interact with the system via menus, search functions, or other typical computer-like operations. Moreover, still pictures of high resolution can be played if they are included in the disc.

Video CDs not equipped with PBC (Version 1.1)

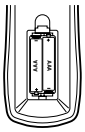
Operated in the same way as audio CDs, these discs allow playback of video pictures as well as sound, but they are not equipped with PBC.

Remote Control Operation Range

Point the remote control at the remote sensor and press the buttons.

- **Distance:** About 23 ft (7 m) from the front of the remote sensor
- **Angle:** About 30° in each direction of the front of the remote sensor

Remote control battery installation



Detach the battery cover on the rear of the remote control, and insert two (R03/AAA) size batteries with ⊕ and ⊖ aligned correctly.

⚠ **Caution**

Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.).

Precautions

Handling the unit

When shipping the unit
The original shipping carton and packing materials come in handy. For maximum protection, re-pack the unit as it was originally packed at the factory.

When setting the unit
The picture and sound of a nearby TV or radio may be distorted during playback. In this case, position the unit away from the TV or radio, or turn off the unit after removing the disc.

To keep the surface clean
Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber of plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

Cleaning the unit

To clean the cabinet
Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents, such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

To obtain a clear picture
The DVD player is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn down, the picture quality will be poor.
Regular inspection and maintenance are recommended after every 1,000 hours of use. (This depends on the operating environment.)
For details, please contact your nearest dealer.

Notes on Discs

Handling discs

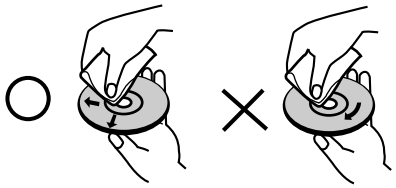
Do not touch the playback side of the disc.
Hold the disc by the edges so that fingerprints will not get on the surface.
Do not stick paper or tape on the disc.

Storing discs

After playing, store the disc in its case.
Do not expose the disc to direct sunlight or sources of heat, or leave it in a parked car exposed to direct sunlight, as there may be a considerable temperature increase inside the car.

Cleaning discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center out.



Do not use strong solvents such as alcohol, benzine, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

About Symbols

About the ⃠ symbol display

"⃠" may appear on the TV screen during operation. This icon means the function explained in this owner's manual is not permitted by the DVD+VCR or is not available on that specific DVD video disc.

About the disc symbols for instructions

A section whose title has one of the following symbol is applicable only to the disc represented by the symbol.

- **DVD** DVD
- **VCD** Video CDs.
- **CD** Audio CDs.
- **MP3** MP3 disc.
- **JPEG** JPEG disc.

Selecting the Viewing Source

You must select one of your output sources (DVD or VCR) to view on the TV screen.

- **If you want to view DVD deck output source:**
Press DVD until DVD indicator in the display window lights and output source of DVD deck is viewed on the TV screen.
- **If you want to view VCR deck output source:**
Press VCR until VCR indicator in the display window lights and output source of VCR deck is viewed on the TV screen.

Notes:

- If you insert a disc while the DVD+VCR is in the VCR mode, the DVD+VCR will switch to DVD mode automatically.
- If you insert a cassette tape without prevention tab while the DVD+VCR is in the DVD mode, the DVD+VCR will switch to VCR mode automatically.

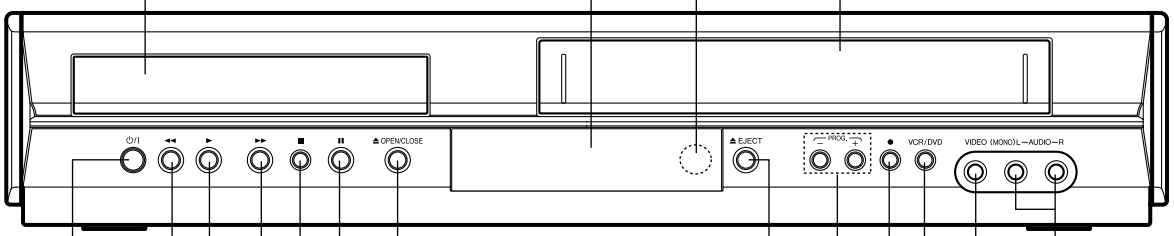
Front Panel

Disc Tray (DVD deck)
Insert a disc here.

Cassette Compartment (VCR deck)
Insert a video cassette here.

Remote Sensor
Point the DVD+VCR remote control here.

Display Windows



▲ OPEN/CLOSE
Opens or closes the disc tray.

❚❚
Pause playback or recording. Press repeatedly for frame-by-frame playback.

■
Stops playback of the disc or tape.

▲ EJECT
Ejects the tape in the VCR deck.

PROG. (-/+)
To scan up or down through memorized channels.

►►
- DVD: Skip to next chapter or track. Press and hold for two seconds for a fast forward search.
- VCR: Advances the tape during the STOP mode or for fast forward picture search.

●
To record normally or to activate One-touch Timer Recording by repeated presses.

►
Starts playback of a disc or tape.

◄◄
- DVD: Skip to beginning of current chapter or track, press twice in quick successions to go to previous chapter or track. Press and hold button for about two seconds to search backward.
- VCR: Rewinds the tape during the stop mode or for fast reverse picture search.

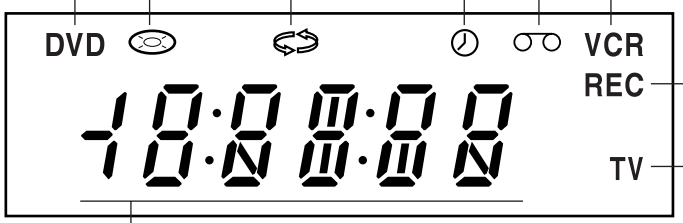
VCR/DVD
Select one of your output sources to view on the TV screen between DVD and VCR.

Video IN Jack

⏻/I
Switches the DVD+VCR ON and STANDBY.

Audio IN (L/R) Jacks

Display Window



The DVD deck is selected.

A disc is in the DVD deck.
(Lights when a disc is in the DVD deck and Flashes when no disc.)

Indicates repeat mode.

DVD+VCR is in timer recording or a timer recording is programmed. (VCR part only)

A cassette is in the VCR deck.

The VCR deck is selected.

Lights when TV mode is active.

DVD+VCR is Recording.
(VCR part only)

Indicates total playing time, elapsed time, remaining time or current deck status (Playback, Pause, etc).

Remote Control

⏻/I
Switches DVD+VCR ON and STANDBY.

TV/VCR •
To view channels selected by the VCR tuner or by the TV tuner.

DVD •
Select the DVD+VCR function mode to DVD.

VCR •
Select the DVD+VCR function mode to VCR.

DISPLAY
- - : - -
- Accesses On-Screen Display (DVD).
- Shows you the current time or counter (VCR).

◄/►/▲/▼
- Selects menu options.
- PR/TRK (+/-): Selects VCR channels. Adjusts manually the tape's picture on the screen.

SETUP/MENU (i)
Accesses or removes DVD Setup menu and VCR menu.

ENTER/OK
Confirms menu selections. Displays functions on the TV screen.

❚❚
- Pause playback or recording.
- Press repeatedly for frame-by-frame playback.

<< (◄◄) •
- For fast reverse picture search.
- Rewinds the tape during the STOP mode.

► •
Starts playback.

>> (►►) •
- For fast forward picture search.
- Advances the tape during the STOP mode.

0-9 numerical buttons
Selects numbered options in a menu.

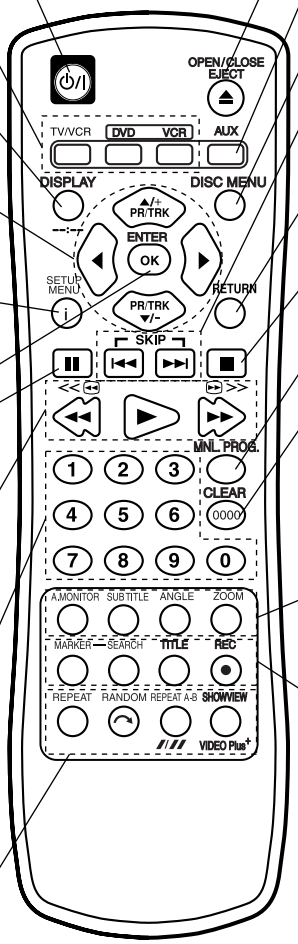
REPEAT •
Repeat chapter, track, title or all.

RANDOM ( ) •
- Plays tracks in random order.
- CM SKIP

REPEAT A-B •
Repeats sequence between two points (A and B)

/// •
Selects recording speed.

SHOWVIEW •
To display the programme menu for ShowView programming.



OPEN/CLOSE, EJECT (⏏)
- Ejects the tape in the VCR deck.
- Opens and closes the disc tray.

AUX
Select input source for recording into tape.

DISC MENU
Accesses menu on a DVD disc.

SKIP (|◄◄ / ►►|)
Skip to beginning of current chapter or track, press twice in quick successions to go to previous chapter or track.
Skip to next chapter or track.

RETURN
- Removes the setup menu.
- Displays the menu of a video CD with PBC.

■
Stops playback or recording.

MNL. PROG.
Places a track on the program list.

CLEAR (0000)
Removes a track number on the program menu or a mark on the MARKER SEARCH menu.

• A.MONITOR
Selects an audio language (DVD) or an audio channel (VCD).

• SUBTITLE
Selects a subtitle language.

• ANGLE
Selects a DVD camera angle, if available.

• ZOOM
Enlarges DVD video image.

• MARKER
Marks any point during playback.

• SEARCH
Displays Marker Search menu.

• TITLE
Displays the disc's Title menu, if available.

• REC (●)
Records normally or activates One touch Timer Recording with repeated presses.

Note:
This remote control uses the same buttons for VCR and DVD functions (ex. PLAY).
When using a VCR, first press the VCR button.
When using a DVD, first press the DVD button.

Rear Panel

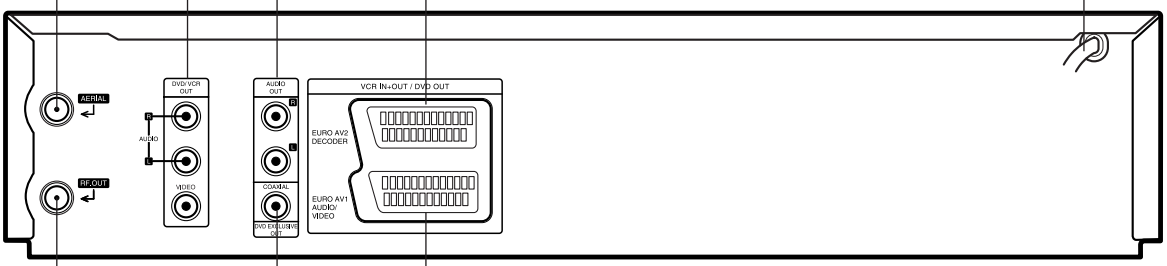
AERIAL
Connect the aerial using this jack.

DVD/VCR OUT (VIDEO/AUDIO (Left/Right))
Connect to a TV with video and audio inputs.

AUDIO OUT (Left/Right) (DVD EXCLUSIVE OUT)
Connect to an amplifier, receiver or stereo system.

EURO AV2 DECODER (VCR IN+OUT/DVD OUT)
Connect to pay-TV decoder, Set Top Box or another video recorder.

AC Power Cord
Connect to a power source.



EURO AV1 AUDIO/VIDEO (VCR IN+OUT/DVD OUT)
Connect to your TV set or another video recorder.

COAXIAL (DVD EXCLUSIVE OUT)
(Digital audio out jack)
Connect to digital (coaxial) audio equipment.

RF.OUT
Connect to your TV using this jack.

⚠

Do not touch the inner pins of the jacks on the rear panel.
Electrostatic discharge may cause permanent damage to the unit.

Precautions

When the equipment is installed in a cabinet or a shelf, make sure that it has sufficient space on all sides to allow for ventilation (10 cm or more on both sides, on top and at the rear).

When discarding batteries, environmental problems must be considered and the local rules or laws governing the disposal of these batteries must be followed strictly.

Failure to heed the following precautions may result in damage to the unit, remote control or disc.

1. **DO NOT place the unit —**
   — in an environment prone to extreme temperatures or humidity.
   — in direct sunlight.
   — in a dusty environment.
   — in an environment where strong magnetic fields are generated.
   — on a surface that is unstable or subject to vibration.
2. **DO NOT block the unit's ventilation openings or holes.** (If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)
3. **DO NOT place heavy objects on the unit or remote control.**
4. **DO NOT place anything which might spill on top of the unit or remote control.** (If water or liquid is allowed to enter this equipment, fire or electric shock may be caused.)
5. **DO NOT expose the apparatus to dripping or splashing.**
6. **DO NOT use this equipment in a bathroom or places with water. Also DO NOT** place any containers filled with water or liquids (such as cosmetics or medicines, flower vases, potted plants, cups, etc.) on top of this unit.
7. **DO NOT place any naked flame sources, such as lighted candles, on the apparatus.**
8. **AVOID violent shocks to the unit during transport.**

Connections

Tips:

- Depending on your TV and other equipment there are various ways you can connect the player.
- Please refer to the manuals of your TV, VCR, stereo system or other devices as necessary for additional connection information.

Notes:

- The picture and sound of a nearby TV, VCR, or radio may be distorted during playback. Position the units away from each other or turn off the unit after removing the disc.
- Make sure the DVD+VCR is connected directly to the TV and tune the TV to the correct video input channel.
- Do not connect the DVD+VCR's AUDIO OUT jack to the phono in jack (record deck) of your audio system. Do not connect the DVD+VCR via another VCR. The DVD image could be distorted by the copy protection system.

Connecting to a TV

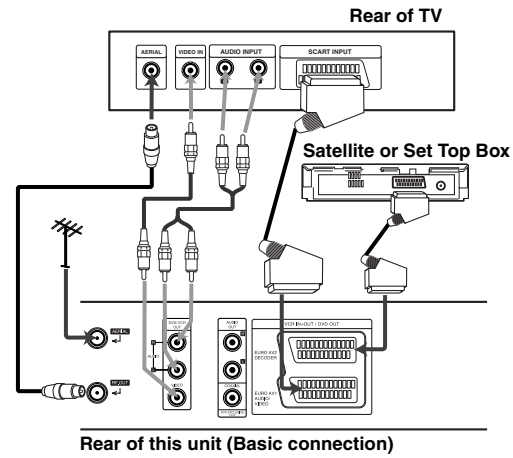
Make one of the following connections, depending on the capabilities of your existing equipment.

Basic connection (AV)

1. Connect the **EURO AV1 AUDIO/VIDEO** on the rear panel of this unit to the SCART input socket on the TV using a SCART lead (not supplied).
   For TV without SCART, connect the yellow VIDEO OUT jack and DVD/VCR AUDIO OUT jacks of this unit to the TV.
2. Some TV broadcasters transmit encoded television signals which you can only see with a purchased or rented decoder. You can connect such a decoder (descrambler) to this unit.

Basic connection (RF)

1. Connect the RF antenna cable from your indoor/ outdoor antenna to **AERIAL** jack on the rear panel of this unit.
2. Connect the supplied RF antenna cable from the **RF.OUT** jack on the rear panel of this unit to your television's Antenna Input.



Connecting to Optional Equipment

Connecting to an amplifier equipped with two channel analog stereo or Dolby Pro Logic II/Pro Logic

Connect the Left and Right **DVD/VCR AUDIO OUT** or **AUDIO OUT (DVD EXCLUSIVE OUT)** jacks on this unit to the audio left and right in jacks on your amplifier, receiver or stereo system, using the audio cables.

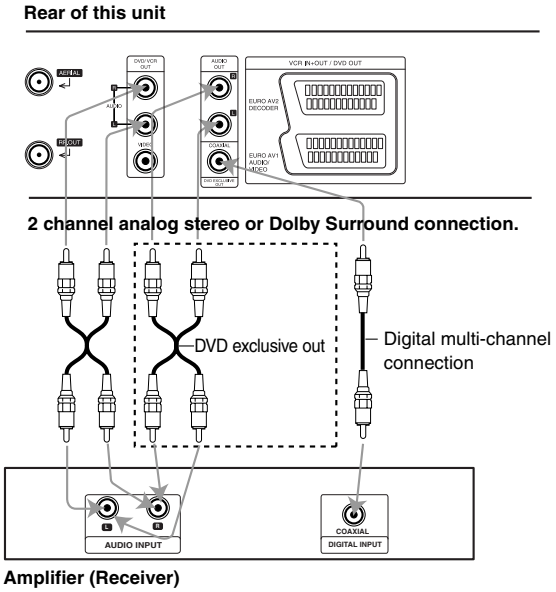
Connecting to an amplifier equipped with two channel digital stereo (PCM) or to an Audio/ Video receiver equipped with a multi-channel decoder (Dolby Digital™, MPEG 2 or DTS)

1. Connect one of this unit's DIGITAL AUDIO OUT jack (**COAXIAL**) to the corresponding in jack on your amplifier. Use an optional digital (coaxial) audio cable.
2. You will need to activate this unit's digital output. (See "AUDIO" on page 18).

Digital Multi-channel sound

A digital multi-channel connection provides the best sound quality. For this you need a multi-channel Audio/ Video receiver that supports one or more of the audio formats supported by your unit (MPEG 2, Dolby Digital and DTS). Check the receiver manual and the logos on the front of the receiver.

Warning:
Due to the DTS Licensing agreement, the digital output will be in DTS digital out when DTS audio stream is selected.



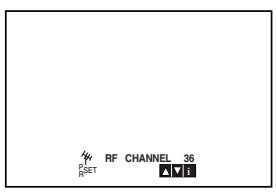
Notes:

- If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.
- Six Channel Digital Surround Sound via digital connection can only be obtained if your receiver is equipped with a Digital Multi-channel decoder.
- To see the audio format of the current DVD in the On-Screen Display, press **A.MONITOR**.

Tuning in a video channel on your TV

Notes:
- The output frequency of this DVD+VCR is set at UHF channel 36. If channel 36 is already used by another TV station, or if the picture is distorted, you can change the transmitter channel of your DVD+VCR. Stages 5 ~ 8 will show you how to change the output frequency of your DVD+VCR.
- Your TV receives signals from the DVD+VCR like another TV station. You have to select a channel number on your TV and tune it in so that you may watch video tapes. If you have used a SCART then your TV should already have a dedicated video channel built into it, usually called AV.

1. Make sure that you have correctly installed your DVD+VCR as described earlier in this book.
   Press **⏻/I** to turn on your DVD+VCR.
   Turn on your TV.
2. Insert a pre-recorded video tape into your DVD+VCR and press ► on the remote control.
   Select a TV channel which you wish to watch video.
   Don't worry if you don't have a video-tape to play at this stage! If you switch your DVD+VCR on and continue stages **3 ~ 4**, instead of seeing video playback tune your TV until you see a bright blue screen.
3. Tune this channel until the video picture is sharp and the sound is clear.
   If you have used a SCART or AUDIO and VIDEO cables you will not have to tune your TV, simply select the AV channel. The AV channel is already pre-tuned for optimum video playback on your TV.
4. Store this channel on your TV.
   You will need to look at the TV instruction book if you do not know how to do this.
5. **Only carry out stages 5 ~ 8 if you cannot obtain clear video playback as described in stages 1 ~ 4.**
   Select a TV channel which you wish to watch video.
   Make sure that your DVD+VCR is in standby pressing **⏻/I** on the remote control (only the clock will be displayed).
6. Press **PROG. (+/-)** on the front of your DVD+VCR for more than 4 seconds.
   RF36 will appear in the display window.
   The following picture will be displayed on the TV screen.



7. Use **PROG. (+/-)** to select another video channel.
   You may select any channel number between 22 and 68.
8. Select a TV channel which you wish to watch video.
   Press **⏻/I** on the front of your DVD+VCR when you have finished.
   Tune this channel so that a bright blue screen appears.
   Store this channel on your TV.

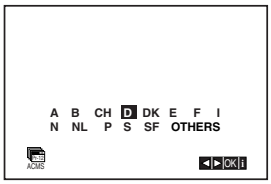
Notes:
Make sure that you have correctly installed your DVD+VCR and successfully tuned in a dedicated video channel on your TV. If you do not tune in a dedicated video channel on your TV you will be unable to view and record video tapes!

Initial preset

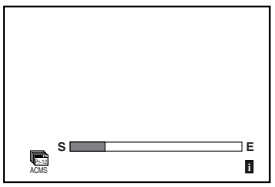
For the following steps we do assume that you have just connected your video recorder for the very first time. In this case the video recorder is on after mains connection. You should not touch any buttons yet. On the connected TV you will now see.

Note:
If this menu does not appear, your video recorder was programmed already.

1. Select the country according to your area with ◄ and ►.
   "A": Austria, "B": Belgium, "CH": Switzerland, "D": Germany, "DK": Denmark, "E": Spain, "F": France, "I": Italy, "N": Norway, "NL": Netherlands, "P": Portugal, "S": Sweden, "SF": Finland, "OTHERS"



2. Press **ENTER/OK** to start the automatic storing of the channels of the TV stations in your area.

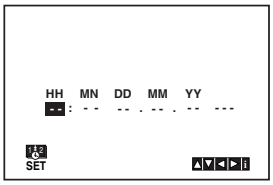


3. The **TV STATION TABLE** will appear when tuning is completed.
   Press **i** to save your settings.

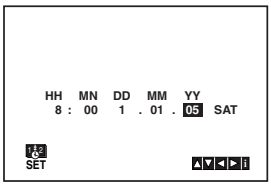
Setting the clock Manually

The clock in your DVD+VCR controls time and date settings for your DVD+VCR.

1. Press **i**.
   Press ◄ or ► to select **SET**.
   Press **ENTER/OK**.
   The auto adjust mode can be set to “OFF” by pressing ENTER/OK if you want to set the time manually.



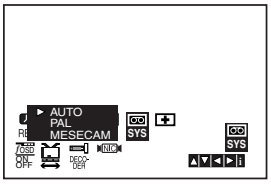
2. Use the ▲ or ▼ on the remote control to alter the **HOURS**, **MINUTES**, **DAY**, **MONTH** and **YEAR**.
   Please note your DVD+VCR uses a 24 hour clock.
   e.g. 1pm will be displayed as 13:00.
   The day of the week will appear automatically when you enter the year.
3. If you make a mistake press ◄ or ► and enter the correct details.



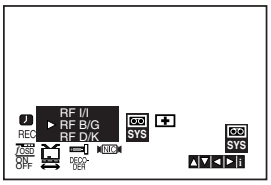
4. Press **i** to return to a TV picture.

To set the colour system

1. Press **i**.
2. The main menu will appear on the TV screen.
3. Press ◄ or ► to select the **SYS** and press **ENTER/OK**.
4. Press ▲ or ▼ to select according to the **COLOUR** system used.



5. Press ◄ or ► to select the RF AUDIO.
   Press ▲ or ▼ to select according to the RF AUDIO used.

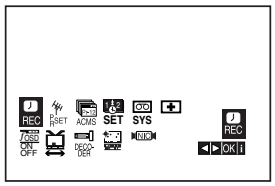


6. Press **i** to remove the menus from the TV screen.

How to use the main menu

This DVD+VCR can easily be programmed by using the menus displayed on screen.
The menus are controlled by the Remote Control Handset.

1. Switch on your TV set and DVD+VCR by pressing the **⏻/I** button.
2. Press **i** button.
   The main menu will appear on the TV screen.



- **REC -** Timer recording setting (see p. 23).
- **PR SET -** Manual tuning setting (see p. 15).
- **ACMS -** ACMS (Automatic Channel Memory System) (see p. 14).
- **SET -** Date & clock setting (see p. 13).
- **SYS -** To set the Colour TV System (see p. 13).
- **(Dr.) -** To check a problem with your VCR (see p. 26).
- **F.OSD ON/OFF -** To display the operational mode of your VCR (see p. 25).
- **(16:9/4:3) -** To select the aspect ratio of your TV (see p. 26).
- **DECODER -** To use a pay-TV decoder (or Satellite) with your VCR (see p. 26).
- **(OPR) -** To improve the playback picture (see p. 20).
  Appear when playback only.
- **NIC -** To activate or deactivate the NICAM digital sound (see p. 25).

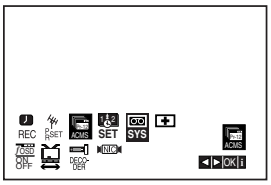
Tip:
You can change the menu language on the DVD setup menu. (See the Menu Language on page 17.)

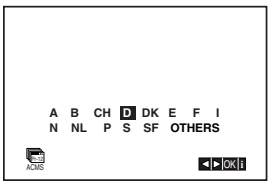
3. Press ◄ and ► to select the desired menu.
   Press **ENTER/OK** and use ▲ or ▼ to select.
4. Press **i** to return to a TV picture.

Tuning in TV Stations Automatically

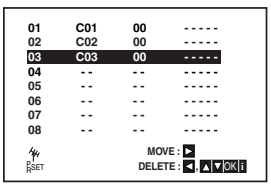
If the TV broadcast signal is weak your DVD+VCR may not detect the necessary information and will not be able to store them correctly. To overcome this problem please turn to the MANUAL TUNING section on page 15.

1. Press **⏻/I** to turn on your DVD+VCR.
2. Press **i** button.
   The main menu will appear on the TV screen.
   Press ◄ or ► to select the **ACMS**.
   Press **ENTER/OK**.





3. Select the country according to your area with ◄ or ►.
   A:Austria, **B:B**elgium, **CH:S**witzerland, **D:G**ermany, **DK:D**enmark, **E:S**pain, **F:F**rance, **I:I**taly, **N:N**orway, **NL:Netherlands**, **P:P**ortugal, **S:S**weden, **SF:F**inland, “OTHERS”
4. Press **ENTER/OK** to start the automatic storing of the channels of the TV stations in your area.
5. The **TV STATION TABLE** will appear when tuning is completed.
   Press **i** to save your settings.

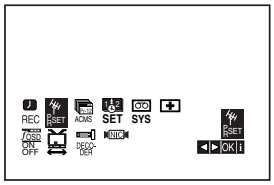


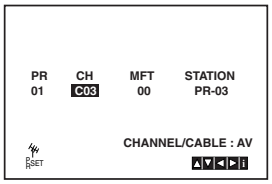
Notes:
The DVD+VCR’s clock will be set automatically when automatic tuning has finished. If the clock is wrong please see “Setting the clock Manually” on page 13.

Tuning in TV Stations Manually

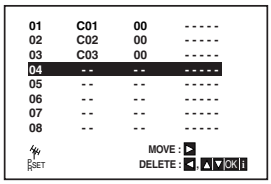
In certain areas of the country broadcast signals may be too weak for your DVD+VCR's automatic tuning process to find or assign TV stations correctly.
You must tune in these weaker broadcast stations manually in order for your DVD+VCR to store them.

1. Press **i**.
   The main menu will appear on the TV screen.
   Press ◄ or ► to select the **PR SET**.
   Press **OK**.

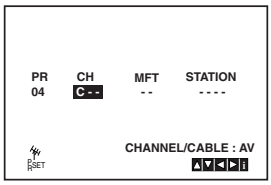




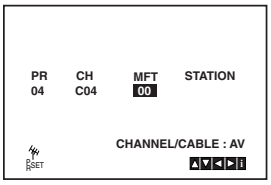
2. Press **i**.
   The station table will appear.
3. Press ▲ or ▼ to select the programme number that you want to tune (for example, PR 04).



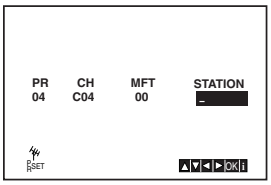
4. Press **OK**.
   Press **AUX** to select **C** (Standard stations) or **S** (Cable stations):
   C02 - C69, S01 - S41.
   Enter the channel number of station that you want to tune, use ▲ or ▼ to find the required station.



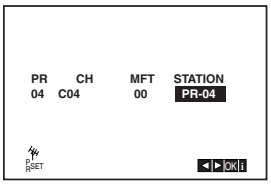
5. Searching will stop when it locates a stations.
   Press ► to select **MFT**.
   Control the fine tuning of the station by using ▲ or ▼.



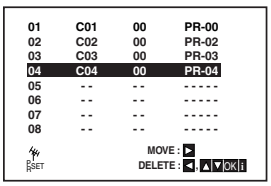
6. Press ► to select **STATION** so that you may name your TV station.
   Press **OK**.
7. Use ▲ or ▼ to select **letters** and **numbers** for the station name.
   Use ◄ or ► to move back and forth between characters.
   Press **OK**.



8. Press **i**, confirm the station placement.



   If you wish to manually tune other stations repeat stages **3 - 8**.

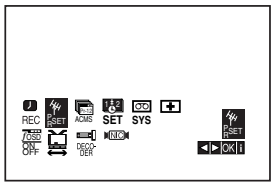


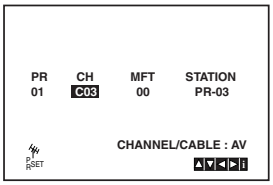
9. Press **i** again.
   Your new TV station has now been tuned into your DVD+VCR.

Changing the order of TV Stations

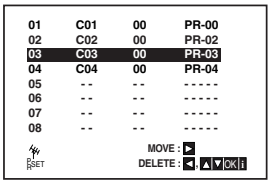
After tuning TV stations into your DVD+VCR you may wish to change the order in which they are stored without having to retune them again. The instructions given on this page will show you how you can simply move them into your desired order.

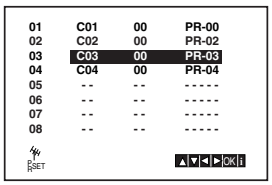
1. Press **i**.
   The main menu will appear on the TV screen.
   Press ◄ or ► to select the **PR SET**.
   Press **ENTER/OK**.



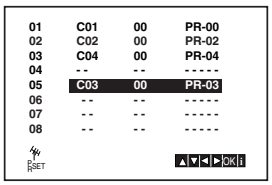


2. Press **i**.
   Press ▲ or ▼ to select the **programme number** you want to move (for example, PR-03).
   Press ►.

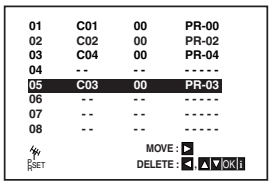




3. Press ▲ or ▼ to select the **programme number** you want to move to (for example, PR-05).



4. Press **ENTER/OK**.
   The selected **programme** will be moved to **the new programme number**.
   If you wish to move other TV stations repeat stages 1 - 4.

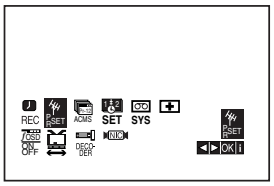


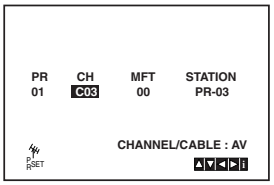
5. Press **i** to remove the menus from the TV screen.

Deleting TV Stations

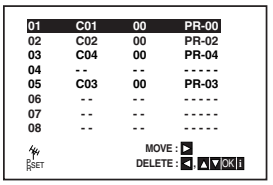
After tuning TV stations into your DVD+VCR you may wish to delete a station.
The instructions given on this page will show you how you can easily delete any unwanted TV stations.

1. Press **i**.
   The main menu will appear on the TV screen.
   Use ◄ or ► to select the **PR SET**.
   Press **ENTER/OK**.

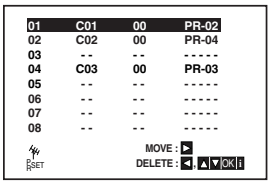




2. Press **i**.
3. Press ▲ or ▼ to select the **programme number** you want to delete. (for example, PR-00)



4. Press ◄.
   After a short while, the selected station will be deleted.
   If you wish to delete other TV stations repeat stages **3 - 4**.



5. Press **i** to remove the menus from the TV screen.

By using the DVD Setup menu, you can make various adjustments to items such as picture and sound. You can also set a language for the subtitles and the Setup menu, among other things. For details on each Setup menu item, see pages 17 to 19.

To display and exit the Menu:
Press SETUP to display the menu. A second press of SETUP will take you back to initial screen.

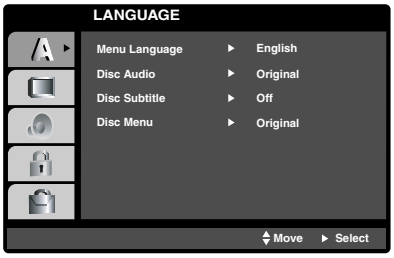
To go to the next level:
Press ► on the remote control.

To go back to the previous level:
Press ◄ on the remote control.

General Operation

1. Press DVD on the remote control.
2. Press SETUP.
   The Setup menu appears.
3. Use ▲/▼ to select the desired option then press ► to move to the second level. The screen shows the current setting for the selected item, as well as alternate setting(s).
4. Use ▲/▼ to select the second desired option then press ► to move to the third level.
5. Use ▲/▼ to select the desired setting then press ENTER/OK to confirm your selection. Some items require additional steps.
6. Press SETUP or ► exit the Setup menu.

LANGUAGE



Menu Language

Select a language for the VCR and DVD's setup menu and information display.

Disc Audio / Subtitle / Menu DVD

Select the language you prefer for the audio track (disc audio), subtitles, and the disc menu.

Original: Refers to the original language in which the disc was recorded.

Other: To select another language, press number buttons then ENTER/OK to enter the corresponding 4-digit number according to the language code list in the reference chapter (see page 36). If you enter the wrong language code, press CLEAR (0000).

Off (for Disc Subtitle): Turn off Subtitle.

DISPLAY

TV Aspect DVD

4:3 : Select when a standard 4:3 TV is connected.

16:9 : Select when a 16:9 wide TV is connected.

Display Mode DVD

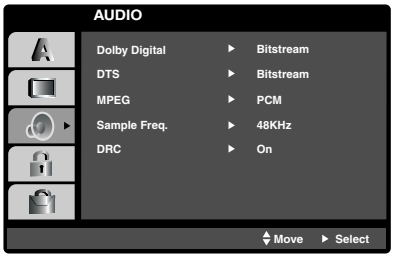
Display Mode setting works only when the TV Aspect mode is set to "4:3".

Letterbox: Displays a wide picture with bands on the upper and lower portions of the screen.

Panscan: Automatically displays the wide picture on the entire screen and cuts off the portions that do not fit.

AUDIO

Each DVD disc has a variety of audio output options. Set this unit's AUDIO options according to the type of audio system you use.



Dolby Digital / DTS / MPEG DVD

Bitstream: Select "Bitstream" if you connect the DVD+VCR's DIGITAL AUDIO OUT jack to an amplifier or other equipment with a Dolby Digital, DTS or MPEG decoder.

PCM (for Dolby Digital / MPEG): Select when connected to a two-channel digital stereo amplifier. DVDs encoded in Dolby Digital or MPEG will be automatically downmixed to two-channel PCM audio.

Off (for DTS): If you select "Off", the DTS signal is not output through the DIGITAL AUDIO OUT jack.

Sample Freq. (Frequency) DVD

If your receiver or amplifier is NOT capable of handling 96 kHz signals, select 48 kHz. When this choice is made, this unit automatically converts any 96 kHz signals to 48 kHz so your system can decode them.

If your receiver or amplifier is capable of handling 96 kHz signals, select 96 kHz. When this choice is made, this unit passes each type of signal through without any further processing.

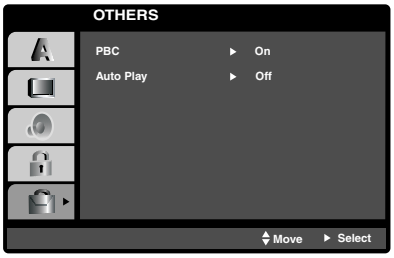
Check the documentation for your amplifier to verify its capabilities.

DRC (Dynamic Range Control) DVD

With the DVD format, you can hear a program's soundtrack in the most accurate and realistic presentation possible, thanks to digital audio technology. However, you may wish to compress the dynamic range of the audio output (the difference between the loudest sounds and the quietest ones). This allows you to listen to a movie at a lower volume without losing clarity of sound. Set DRC to On for this effect.

OTHERS

The PBC and Auto Play settings can be changed.



PBC VCD

Set Playback Control (PBC) to On or Off.

On: Video CDs with PBC are played according to the PBC.

Off: Video CDs with PBC are played the same way as Audio CDs.

Auto Play DVD

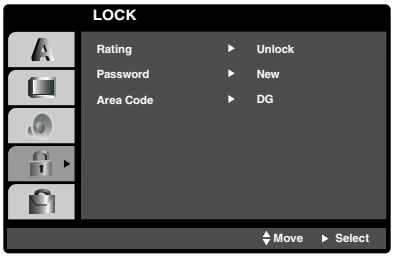
You can set up the DVD+VCR so a DVD disc automatically starts playing whenever the DVD is inserted.
If Auto Play mode is set to On, this DVD player will search for title that has the longest playback time and then play back the title automatically.

On: Auto Play function is active.

Off: Auto Play function is not active.

Note:
The Auto Play function may not work for some DVDs.

LOCK (Parental Control)



Rating DVD

Some movies contain scenes that may not be suitable for children to view. Many of these discs contain parental control information that applies to the complete disc or to certain scenes on the disc. Movies and scenes are rated from 1 to 8, depending on the area.
DVD video discs may or may not respond to the parental control setting if the Area code of the disc is set wrongly. Some discs offer more suitable scenes as an alternative. Ratings are area dependent.

The parental control feature allows you to block access to scenes below the rating you input, thereby preventing your children from being able to view material you believe is unsuitable.

1. Select “Rating” on the LOCK menu then press ►.
2. To access the Rating, Password and Area Code features, you must input the 4-digit security code you created.

   If you have not yet entered a security code you are prompted to do so. Input a 4-digit code and press ENTER/OK. Enter it again and press ENTER/OK to verify. If you make a mistake before pressing ENTER/OK, press CLEAR (0000).
3. Select a rating from 1 to 8 using the ▲/▼ buttons.

   1-8: Rating one (1) has the most restrictions and rating eight (8) has the least restrictive.

   Unlock: If you select unlock, parental control is not active and the disc plays in full.
4. Press ENTER/OK to confirm your rating selection, then press SETUP to exit the menu.
5. Press OPEN/CLOSE (⏏) to activate parental control.

Note:
If you set a rating for the player, all disc scenes with the same rating or lower are played. Higher rated scenes are not played unless an alternate scene is available on the disc. The alternative must have the same rating or a lower one. If no suitable alternative is found, playback stops. You must enter the 4-digit password or change the rating level in order to play the disc.

Password (Security Code)

You can enter or change password.

1. Select “Password” on the LOCK menu then press ►.
2. Follow step 2 as shown left column (Rating).
   To change the password, select the “Change”, press ENTER/OK and input the new 4-digit code then press ENTER/OK. Input it again to verify.
3. Press SETUP to exit the menu.

If you forget your Security Code

If you forget your security code you can clear it using the following steps:

1. Press SETUP to display the Setup menu.
2. Input the 6-digit number “210499” and the security code is cleared.
3. Enter a new code as described above.

Area Code DVD

Enter the Area Code whose standards were used to rate the DVD video disc, based on the list in the reference chapter (see page 36).

1. Select “Area Code” on the LOCK menu then press ►.
2. Follow step 2 as shown left (Rating).
3. Select the first character using ▲/▼ buttons.
4. Press ► and select the second character using ▲/▼ buttons.
5. Press ENTER/OK to confirm your area code selection.

Playing a tape

You will only be able to load and eject video cassettes when your DVD+VCR is plugged into the mains.
Your DVD+VCR may also playback recordings from NTSC tapes (on PAL TV).

Getting a better picture
When a cassette is inserted and playback started, the automatic tracking function works to get the best possible picture automatically. If the quality of the recording is poor, repeatedly press ▲ or ▼ on the remote control to manually adjust the tracking until any distortions have been removed.

1. Make sure that you have correctly connected your DVD+VCR as described earlier in this book.
   Turn on your TV.
   Press **⏻/I** to turn on your DVD+VCR.
   Insert the video cassette into your DVD+VCR.
   The video cassette should have the window side facing up and the arrow facing away from you.
2. Press ► to start playing your tape.
   If you load a video cassette which has had its record protection tab removed, playback of the cassette will start automatically.

   AUTO TRACKING
   Your DVD+VCR will automatically adjust the tracking to give the best picture quality.
   If noise bars appear during playback, adjust the tracking manually by pressing **PR/TRK (+/-)**.
3. Press ❚❚ to still a picture.
   Press ❚❚ repeatedly to advance the tape frame by frame.
   If you press ►►, the picture will be slowed down at about 1/19 times the normal playback.
   Tapes can be paused for up to 5 minutes. After 5 minutes your DVD+VCR will stop the tape to prevent damaging the tape or your DVD+VCR.
   Still picture quality can be improved slightly by using ▲ or ▼.
4. Press ► to continue playing your tape.

   Double speed playback (SP mode only)
   Press the "► (X2)" button during normal playback. The tape will play back at double speed and without sound.
   Press the "► (X2)" button to return to playback at normal speed

   Picture search:
   During playing back press either ◄◄ or ►► to this will enable you to rapidly wind the tape (7 times normal playback) see where you are on the tape.

Notes:
- When playing back tapes that have been over-recorded with new content, the original audio may be audible during auto tracking.
- The image may be distorted during special playback in LP mode.

Logic search:
During fast forwarding or rewinding press and hold ◄◄ or ►► the picture will be played back at 7 times normal playback speed.

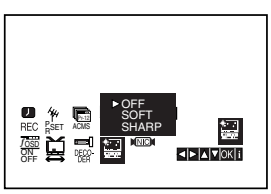
5. **Slow motion playback, Shuttle:**
   During playing back or still picture press ◄ or ►.
   You can reach the following playback speeds.
   (-7xplay, -3xplay, -play, still, 1/19 slow, play, 2xplay, 7xplay)
   To switch off the slow motion and shuttle, press the desired function.
   During slow motion and shuttle, the noise bars may appear on the picture according to the status of tape.
   If distortions can be seen in the picture, reduce them with ▲ or ▼.
6. Press ■ to end playback.
   Press **EJECT** (⏏).

   If the end of the tape is reached, your DVD+VCR will stop playback automatically, rewind, stop, eject the tape.

CM (Commercial Message) Skip:
This feature enables you during playback of a tape to skip a commercial break in a few seconds, then resume normal playback.
While tape is playing press ↷ on the remote control to skip commercial (or another programme material).
Repeatedly press ↷ to skip:
1 Press 30 seconds
2 Press 60 seconds
3 Press 90 seconds
4 Press 120 seconds
5 Press 150 seconds
6 Press 180 seconds

OPR (Optimum Picture Response)
This feature automatically improves playback picture quality by adjusting your DVD+VCR to the condition of the tape. Please note that the OPR icon ( ) will only appear in play that mode when playing a tape.

1. Press **i**.
2. Press ◄ or ► to select **(OPR)**.
3. Press **ENTER/OK**.
4. Press ▲ or ▼ repeatedly to select: **OFF**, **SOFT** or **SHARP**.
5. Press **i** return to screen.



Instant Timer Recording

Your DVD+VCR allows you to make recordings using a variety of simple methods:

Instant Timer Recording start recording immediately for a set period of time or until the video cassette runs out.

Your DVD+VCR incorporates Long Play (LP) which enables you to record up to twice the amount of time on a video cassette. For example an E-180 will record up to 180 minutes using Standard Play (SP); using LP you will be able to record up to 360 minutes. Please note there will be a slight loss in picture and sound quality when using LP.

1. Make sure that you have correctly connected your DVD+VCR as described earlier in this book.
   Press **⏻/I** to turn on your DVD+VCR.
2. Insert a video cassette with protection tab into your DVD+VCR.
   The video cassette should have the window side facing up and the arrow facing away from you.
3. Press ▲ or ▼ to select the **programme number** you wish to record.
   You may also directly select programme number using the **numbered buttons** on the remote control.
4. If you wish to record directly from the SCART or RCA jacks, repeatedly press AUX until the socket you wish to record from is displayed.

   AV 1 for recording from EURO AV1 SCART jacks on the rear of your unit.
   AV 2 for recording from EURO AV2 SCART jacks on the rear of your unit.
   AV 3 for recording from VIDEO IN and AUDIO IN (Left & Right) jacks on the front of your unit.
5. Press ▰/▰▰ if you wish to record in Long Play or Standard Play.

   SP will produce improved picture and sound quality, however LP will provide twice as much recording time as SP.
6. Press **REC (●)** on the remote to start recording.

   Press ● on your unit or press **REC (●)** on the remote several times. Each successive press will increase the record time by 30 minutes until you reach a maximum of 9 hours.
7. Press ❚❚ to avoid recording unwanted scenes.
   Press ❚❚ to continue recording.

   Tapes can be paused for up to 5 minutes; RECP will be displayed when a tape is paused. After 5 minutes your DVD+VCR will stop recording to prevent damaging the tape or your DVD+VCR.
8. Press ■ to end recording.
   Press **EJECT (⏏)**.

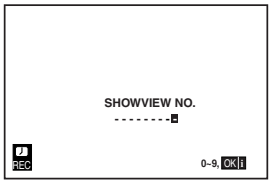
Notes:
- If you do not wish to record on a tape (this can happen quite easily by accident!) remove the protection tab on the back edge of the video cassette.
- It is possible to record on a video cassette with the record protection tab removed by covering the hole with self adhesive tape.
- Remember you can record one programme while watching another by starting your instant recording, press **TV/VCR** to select TV mode and then selecting a different channel on your TV.

ShowView Programming

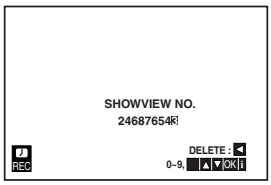
ShowView greatly simplifies entering the date, channel, start and end times of a Timer Recording by simply entering a ShowView Code. ShowView Codes are published in most TV guide magazines; they can vary one to nine numbers in length.

SHOWVIEW is a registered trademark of Gemstar Development Corporation.
The SHOWVIEW system is manufactured under license from Gemstar Development Corporation.

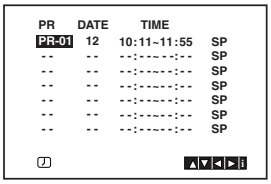
1. Make sure that TV channels have been tuned and stored in correct SHOWVIEW order.
   Insert a video cassette with protection tab into your DVD+VCR.



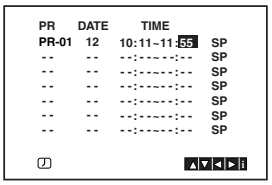
2. Press **SHOWVIEW**.
3. Press the **numbered buttons** to enter the **ShowView Code** of the TV programme that you wish to record.
   If you make a mistake press ◄ then enter the revised number.



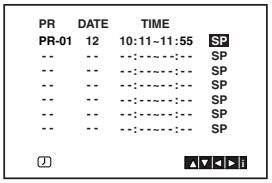
4. Press **ENTER/OK**.
   If **PLEASE CHECK** is displayed it means that you have entered the wrong ShowView number, entered the ShowView number incorrectly.
   If "**- -**" is displayed, you have to enter the programme number of the station, you want to record from.



5. Press ◄ or ► to select the settings that you wish to revise. (PR, DATE, TIME and SP).
   Press ▲ or ▼ to enter the correct information.



6. Press ► to select the recording speed.
   Press ▲ or ▼ to select the desired tape speed (SP, IP, or LP).
   IP mode determines how much tape is left and switches speed from SP to LP, if necessary, to complete recording the program.
   Check that the timer event details are correct.
   If you wish to record from AUDIO IN and VIDEO IN on the front or from either of the EURO SCART sockets on the back of VCR, press AUX to select for correct display (AV1, AV2 or AV3).



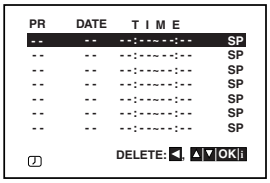
7. If you want to make another ShowView recording repeat stages **2 - 7**.
   Press **i** twice.
   If **PLEASE CHECK** is displayed, you have entered incorrect information and will need to re-enter the data.
   Press **⏻/I** to switch your DVD+VCR power off mode.
   ⏲ will appear in the video recorder's display while your VCR waits to make the recording.
   To watch a DVD during timer recording standby mode, press **⏻/I** and DVD to switch to DVD mode.
8. Press **⏻/I** to end recording.

Timer recording using On Screen Display

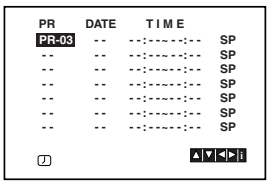
You may set up to seven timer record events within one month of the current date.

Note:
Before setting the timer make sure that you have set the DVD+VCR clock correctly and you know which stations you have tuned TV stations on your DVD+VCR.

1. Insert a video cassette with protection tab into your DVD+VCR.
   The video cassette should have the window side facing up and the arrow facing away from you.
2. Press **i**.
   Press ◄ or ► to select **REC**.
   Press **ENTER/OK**.



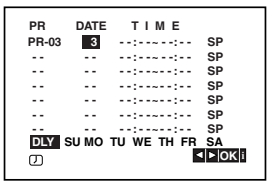
3. Press **ENTER/OK** to start setting the timer record event.
4. Use the ▲ or ▼ to enter the station that you wish to record then press ►.



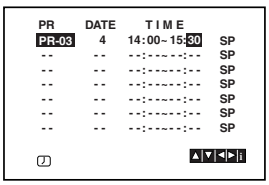
Note:
If all timer record events are full press ▲ or ▼ to select the event that you wish to remove and replace.
Press ◄ to delete the event.

5. Use the ▲ or ▼ to enter the date of the programme.

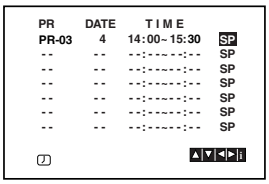
   If you press **ENTER/OK** before entering the date you may select one of the following automated recording features. Press ◄ or ► to select, then press **ENTER/OK** to confirm.
   DLY To record every day (except Saturday and Sunday) at the same time.
   SU~SA To record at the same time every week.



6. Use ▲/▼/◄/►buttons to enter the recording start and end times of the programme that you wish to record.
   Please note your DVD+VCR uses a 24 hour clock.
   e.g. 1pm will be displayed as 13:00.



7. Press ► to select the recording speed.
   Press ▲ or ▼ to select the desired tape speed (SP, IP, or LP).
   IP mode determines how much tape is left and switches speed from SP to LP, if necessary, to complete recording the program.



Timer recording using On Screen Display (Continued)

8. Press **i** to set another timer record event and follow steps 3 to 8.
   Check that the timer event details are correct.
   Press **i** return to screen.

   If **PLEASE CHECK** is displayed, you have entered incorrectly and will need to re-enter the data.

9. Press **⏻/I** to switch your DVD+VCR to Timer Standby mode.

   The timer symbol (⏲) will appear in the display window while your DVD+VCR waits to make the recording.

10. Press **⏻/I** to end timer recording.

Notes:

- The DVD+VCR will automatically power off when Timer Recording ends.
- During timer recording standby mode, the DVD and VCR mode cannot be operated. To use the DVD+VCR, press **⏻/I**. After you use the DVD or VCR, press **⏻/I** again to put the VCR into timer recording standby mode.
- If at a later date you wish to **delete** or **change** any of the settings in timer event memory you may do so without having to enter all the timer event information again. Simply display the timer event screen. Use ▲ or ▼ to select the event that you wish to **delete** or **change**.

  Press ◄ to delete the event...or
  Press **ENTER/OK** to change; then press ◄ or ► to select; Station, Date, Start and End times and recording speed. Press ▲ or ▼ to enter the correct information.
- **If Timer record events Overlap...**
  Make sure that the preset times of the timer recording events do not overlap. If they do, the earlier programme will always be given priority.

  Example:
  Programme 1 is programmed to start at 16:00 and end at 17:00.
  Programme 2 is programmed to start at 16:30 and end at 17:30.
  (In this case, Programme 1 will be recorded in its entirety, but only the last 30 minutes of Programme 2 will be recorded.)
- To watch a DVD while performing a timer recording, press **TV/VCR** to select VCR mode.

Hi-Fi Stereo Sound System (NIC)

Your DVD+VCR will record and playback Hi-Fi stereo sound. In addition it has a stereo NICAM digital stereo sound decoder. This allows you to record and playback the sound in several different ways. Video cassettes recorded on your DVD+VCR will have a normal mono audio track and two VHS Hi-Fi stereo audio tracks. These stereo tracks allow you to make audio recordings in Hi-Fi stereo or bilingual mode from a TV broadcast, stereo audio system, video disc or another Hi-Fi VCR.

1. Your DVD+VCR's NICAM digital sound decoder allows you to enjoy broadcasts with NICAM sound, as well as standard stereo, bilingual and mono sound. The particular type of sound received or that recorded will be briefly displayed on the TV screen for a couple of seconds:

   STEREO NICAM
   Sound is automatically recorded on the Hi-Fi stereo and mono tracks of the video tape.

   BIL NICAM
   Both audio channels will be recorded on the Hi-Fi stereo tracks. The primary language channel (left) will be recorded on the mono track of the video tape.

   MONO
   The sound is recorded on the Hi-Fi tracks and the mono track of the video tape without any separation.

2. Press **AUDIO** repeatedly until the desired audio mode appears.

3. The choice is **STEREO**, **LEFT**, **RIGHT** and **MONO**. In **BIL NICAM** playback the primary language is output on the left channel and the secondary channel is output simultaneously from the right channel when audio output is set to **STEREO**. The primary language will be output from both channels when the audio setting is **MONO**.
   Please note that when adjusting the tracking control Hi-Fi stereo sound may revert to **MONO**.

Note:
When OFF is selected in NIC, only mono sound will be output.

On Screen Display (F.OSD)

You may easily display the current time or tape counter, amount of tape left, day, month, year, day of week, programme channel, tape speed and operational mode of your DVD+VCR on the TV screen. If a recording is taking place these On Screen Displays will not be recorded onto the tape.

1. Press **DISPLAY** to display.
   Press **DISPLAY** repeatedly to cycle through the display options. The tape counter and amount of tape left will appear if there is a tape loaded.

2. After 3 seconds the majority of the On Screen Displays will clear leaving only the clock or tape counter and the amount of tape left on the screen. Press **DISPLAY** again to remove all displays from the TV screen.

Note:
It cannot display when f.OSD is OFF.

Tape Counter Memory Stop

The **Digital Tape Counter** can be displayed on the display window instead of the time by pressing **DISPLAY** on the remote control. The Digital Tape Counter indicates the relative positions of recordings on the tape.

1. Press **DISPLAY**.
   Press **CLEAR (** 0000 **)** to set the counter to 0:00:00.
   Press ► or start playback or recording.

   The tape counter will display the actual play time in hours, minutes and seconds.

2. Press ■ when playback or recording is complete.
   Press ◄◄.

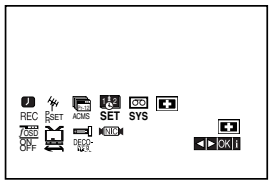
   The tape will rewind and automatically stop when the counter returns to 0:00:00.

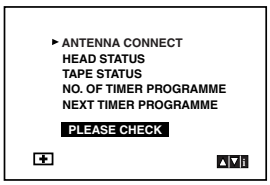
Note:
To rewind to the beginning of the tape, press ◄◄ again.

Video Doctor (Self-Diagnosis)

This feature informs you that there is a problem with your DVD+VCR. These error messages will appear on the TV screen.

1. Press **i**.
   Press ◄ or ► to select .
   Press **ENTER/OK**.





2. Press ▲ or ▼ to check a problem.

   ANTENNA CONNECT
   - **PLEASE CHECK:**
     Connect the aerial into the jack securely.

   HEAD STATUS
   - **PLEASE CLEAN:**
     Clean your video heads.

   TAPE STATUS
   - **NOT RECORDABLE:**
     Insert a tape with its protection tab in place

   NO. OF TIMER PROGRAMME
   - **2**
     Shows the number of timer recording.

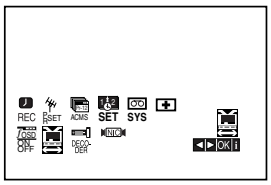
   NEXT TIMER PROGRAMME
   - **PR-01 26 10:00~11:00 SP**
     Shows the current status of timer recording.

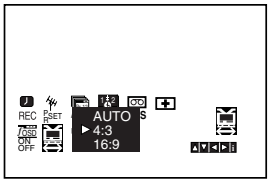
3. Press **i** to remove the menus from the TV screen.

Wide Screen Compatibility 16:9

Your DVD+VCR can record and play back wide screen aspect ratio programmes (16:9). To record a wide screen format programme successfully the correct type of wide screen signal must be broadcast by the TV station.

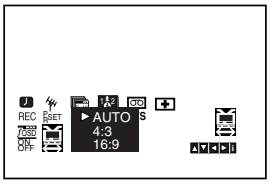
1. Switch on your DVD+VCR.
   Press **i**.
   Press ◄ or ► to select .
   Press **ENTER/OK**.





2. Press ▲/▼ repeatedly to select: **AUTO**, **4:3** or **16:9**.

   AUTO:
   Automatically plays back Wide-Screen programmes as Wide-Screen and Normal programmes as normal.
   4:3:
   Only for playing back and recording Normal format recordings (4:3).
   16:9:
   Only for playing back and recording Wide-Screen format recordings (16:9).



3. Press **i** to remove the menus from the TV screen.
   To enjoy Wide-Screen playback you must connect your VCR to the TV using a SCART cable.

To set the decoder

We have already described, how to connect a decoder for pay-TV station as DECODER or PREMIERE on page 10. For the recording of an encoded station you do not have to control anything. You just select the station and wait shortly until the decoding will start.

1. Press **i**.
   The main menu will appear on the TV screen.
   Press ◄ or ► to select the **DECODER**.
   Press **ENTER/OK**.

2. Press ▲ or ▼ to select.

   ON: When the decoder is connected to the AV2 socket.

   OFF: When another VCR is connected to the AV2 socket.

Additional Operation - VCR part

Recording from External Components

You can record from an external component, such as a camcorder or VCR, connected to any of the DVD+VCR's external inputs.

1. Make sure that the component you want to record from is connected properly to the DVD+VCR.
2. Press AUX repeatedly to select the external input to record from.

   AV 1 for recording from EURO AV1 SCART jacks on the rear of your unit.
   AV 2 for recording from EURO AV2 SCART jacks on the rear of your unit.
   AV 3 for recording from VIDEO IN and AUDIO IN (Left & Right) jacks on the front of your unit.
3. Load a recordable tape.
4. Set a recording mode (SP or LP) as necessary by pressing ///// repeatedly.
5. Play the tape or disc in the external component. If you have a TV attached to your DVD+VCR, you can see the video playing.
6. Press ● once to start recording.
   The REC indicator lights in the display window.
7. Press ■ to stop recording.

Notes:

- Before recording, confirm the recording start position.
- If your source is copy-protected using CopyGuard, you will not be able to record it using this unit. See Copyright on page 2 for more details.
- To record for a fixed length of time, see One-touch Timer Recording.

Copying from DVD to VCR

You can copy the contents of a DVD to a VHS tape.

1. Insert the disc you wish to copy into the DVD deck and close the disc tray.
2. Insert a blank VHS video tape into the VCR deck.
3. Find the place on the DVD from which you want to start dubbing using the ►, ◄◄, ►► and ❚❚ functions.
   For best results, pause playback at the point from which you want to record.
4. Press ● on the Remote Control. The DVD goes into PLAY mode and the VCR goes into RECORD mode. If the DVD disc menu appears, you may need to press ► manually to begin copying.
5. When the DVD is finished playing, press ■ to end copying.

Notes:

- If the DVD you are attempting to copy is copy protected, you will not be able to copy the disc. It is not permitted to copy Macrovision encoded DVDs (or Discs). "LOCK" is displayed in the display window.
- You must stop the copy process manually when the DVD movie ends, or the unit may replay and record over and over again.
- When you stop the DVD playback during copying, the recording on VCR is stopped automatically.

Playback Setup

1. Turn on the TV and select the video input source connected to the DVD+VCR.
2. Turn on the audio system (if applicable) and select the input source connected to the DVD+VCR.
3. Press OPEN/CLOSE (⏏) to open the disc tray and load your chosen disc in the tray, with the playback side down.
4. Press OPEN/CLOSE (⏏) to close the tray. Playback starts automatically. If playback does not start, press ►.
   In some cases, the disc menu might appear instead.
5. To stop the playback, press ■.
   The unit records the stopped point, depending on the disc. "❚❚■" appears on the screen briefly. Press ► to resume playback (from the scene point). If you press ■ again or unload the disc ("■" appears on the screen.), the unit will clear the stopped point. Press OPEN/CLOSE (⏏) to remove the disc. Press OPEN/CLOSE (⏏) to close disc tray or press ⏻/I, the disc tray closes automatically and unit turns off.

If a menu screen is displayed

The menu screen may be displayed first after loading a DVD or Video CD which offer a menu.

DVD

Use the ◄ ► ▲ ▼ buttons to select the title/chapter you want to view, then press ENTER/OK to start. Press TITLE or DISC MENU to return to the menu screen.

VCD

Use the number buttons to select the track you want to view and press RETURN to return to the menu screen. Menu settings and operating procedures may differ. Follow the instructions on each menu screen. You also may set PBC to Off (See "PBC" on page 18).

Notes:

- If parental control is set and the disc is not within the rating settings you must input the password. (See "LOCK" on page 19).
- DVDs may have a region code. Your player will not play discs that have a region code different from your player. The region code for this player is 2 (two).
- In some cases, playback of discs recorded in the NTSC system may be jerky.

General Features

Notes:
Unless stated otherwise, all operations described use the remote control. Some features may also be available on the Setup menu.

Moving to another TITLE DVD

When a disc has more than one title, you can move to another title. Press DISPLAY and select desired title by using number (0-9) or ◄ / ► then press ENTER/OK to move to another title.

Moving to another CHAPTER / TRACK

DVD VCD

When a title on a disc has more than one chapter or a disc has more than one track, you can move to another chapter/track as follows:

- Press ⏭ or ⏮ briefly during playback to select the next chapter/track or to return to the beginning of the current chapter/track.
- Press ⏮ twice in quick successions to step back to the previous chapter/track.
- To go directly to any chapter during DVD playback, press DISPLAY and press ▲ / ▼ to select the chapter/track icon. Input the chapter/track number (0-9) or use ◄ / ►.

Note:
On a Video CD with PBC, you must set PBC to Off on the setup menu to use this function (See "PBC" on page 18).

Slow Motion DVD VCD

1. Press ►► during still mode.
   The DVD+VCR will now go into SLOW mode.
2. Use ►► to select the required speed:
   ❚► 1/7, ❚► 1/6, ❚► 1/4, or ❚► 1/2 (forward).
3. To exit Slow Motion mode, press ►.

Note:
Slow motion playback in reverse is not possible.

Still Picture and Frame-by-Frame Playback

DVD VCD

1. Press ❚❚ during playback. Advance the picture frame-by-frame by pressing ❚❚ repeatedly.
2. To exit still motion mode, press ►.

Search DVD VCD

1. Press ◄◄ or ►► during playback.
2. Press ◄◄ or ►► repeatedly to select the required speed:
   DVD disc; X2, X4, X16 or X100
   Video CD; X2, X4, X8
3. To exit SEARCH mode, press ►.

Time Search DVD VCD

To start playing at any chosen time on the disc:

1. Press DISPLAY during playback. The time search box shows the elapsed playing time.
2. Press ▲/▼ to select the time clock icon and " -:--:-- " appears.
3. Input the required start time in hours, minutes, and seconds from left to right. If you enter the wrong numbers, press CLEAR (0000) to remove the numbers you entered. Then input the correct numbers.
4. Press ENTER/OK to confirm. Playback starts from the selected time.

Note:
On a Video CD with PBC, you must set PBC to Off on the setup menu to use this function (See "PBC" on page 18).

Marker Search DVD VCD

To enter a Marker

You can start playback from up to nine memorized points. To enter a marker, press MARKER at the desired point on the disc. The Marker icon appears on the TV screen briefly. Repeat to enter up to nine markers.

To Recall or Clear a Marked Scene

1. During disc playback, press SEARCH. The marker search menu appears on the screen.
2. Within 10 seconds, press ◄/► to select a marker number that you want to recall or clear.
3. Press ENTER/OK and playback starts from the marked scene. Or, Press CLEAR (0000) and the marker number is erased from the list.
4. You can play any marker by inputting its number on the marker search menu.

Repeat DVD VCD

You can repeat a title/chapter/all/track on a disc. Press REPEAT during playback to select a desired repeat mode.

DVD Video Discs - Repeat Chapter/Title/Off
- Chapter: repeats the current chapter.
- Title: repeats the current title.
- Off: does not play repeatedly.

Video CDs - Repeat Track/All/Off
- Track: repeats the current track
- All: repeats all the tracks on a disc.
- Off: does not play repeatedly.

Note:
- On a Video CD with PBC, you must set PBC to Off on the setup menu to use this function (See "PBC" on page 18).
- If you press ►►| once during Repeat Chapter (Track) playback, the repeat playback cancels.

Repeat A-B DVD VCD

To repeat a sequence.

1. Press REPEAT A-B at your chosen starting point. "A- " appears briefly on the TV screen.
2. Press REPEAT A-B again at your chosen end point. "A- B" appears briefly on the TV screen and the repeat sequence begins.
3. Press REPEAT A-B again to cancel.

Zoom DVD VCD

Use zoom to enlarge the video image.

1. Press ZOOM during playback or still playback to activate the Zoom function. The square frame appears briefly in the right bottom of the picture.
2. Each press of the ZOOM button changes the TV screen in the sequence:

   100% size → 150% size → 200% size → 300% size → 400% size → 100% size.
3. Use the ◄ ►▲▼ buttons to move through the zoomed picture.
4. To resume normal playback, press ZOOM repeatedly or CLEAR (0000) button.

Note:
Zoom may not work on some DVDs.

Changing the Audio Channel VCD

Press AUDIO repeatedly during playback to hear a different audio channel (Stereo, Left, Right).

Last Scene Memory DVD CD VCD

This player memorizes last scene from the last disc that is viewed. The last scene remains in memory even if you remove the disc from the player or switch off the player. If you load a disc that has the scene memorized, the scene is automatically recalled.

Note:
This player does not memorize the scene of a disc if you switch off the player before commencing to play the disc.

Instant Replay DVD

Press AUX during playback and the disc will reverse picture search through 10 seconds of playback. And then the playback will start from the point again.

Screen Saver

The screen saver appears when you leave the DVD+VCR in Stop mode for about five minutes.

Special DVD Features

Checking the contents of DVD discs: Menus

DVDs may offer menus that allow you to access special features. To use the disc menu, press DISC MENU. Input the corresponding number or use the ◄ ►▲▼ buttons to highlight your selection.
Then press ENTER/OK.

Title Menu DVD

1. Press TITLE. If the current title has a menu, the menu appears on the screen. Otherwise, the disc menu may appear.
2. The menu offers features such as camera angles, spoken language and subtitle options, and chapters for the title.
3. Press TITLE to exit.

Disc Menu DVD

Press DISC MENU and the disc menu is displayed. Press DISC MENU again to exit.

Camera Angle DVD

If the disc contains scenes recorded at different camera angles, you can change to a different camera angle during playback. Press ANGLE repeatedly during playback to select a desired angle. Note that the number of the current angle appears on the display.

Tip:
The Camera Angle icon is displayed on the TV screen when alternate angles are available.

Changing the Audio Language DVD

Press A.MONITOR repeatedly during playback to hear a different audio language or audio track.

Subtitles DVD

Press SUBTITLE repeatedly during playback to see the different subtitle languages.

Note:
If there is no information, ⃠ is displayed.

On-Screen Display - DVD

You can display the general playback status on the TV screen. Some items can be changed using the menu. To use the on-screen display:

1. Press DISPLAY during playback.
2. Press ▲ / ▼ to select an item.
   The selected item is highlighted.
3. Press ◄ / ► to change the setting. You can also use the number buttons if appropriate (e.g. inputting the title number). For some functions, press ENTER/OK to execute the setting.

Notes:

- Some discs may not provide all of the features shown below.
- If no button is pressed for 10 seconds, the on-screen display disappears.
- If ⃠ is displayed, action prohibited or not available.

Example: On-Screen Display during playing DVD Video

Items		Selection Method
Title Number		◄ / ►, Numbers ENTER/OK
Chapter Number		◄ / ►, Numbers ENTER/OK
Time search		Numbers ENTER/OK

Example: On-Screen Display during playing VCD

Items		Selection Method
Track Number (or PBC mode)		◄ / ►, Numbers ENTER/OK
Time search		Numbers ENTER/OK

Maintenance and Service

Refer to the information in this chapter before contacting a service technician.

Handling the Unit

When shipping the unit

Please save the original shipping carton and packing materials. If you need to ship the unit, for maximum protection, re-pack the unit as it was originally packed at the factory.

Keeping the exterior surfaces clean

- Do not use volatile liquids such as insecticide spray near the unit.
- Do not leave rubber or plastic products in contact with the unit for a long period of time. since they leave marks on the surface.

Cleaning the unit

To clean the player, use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution.

Do not use strong solvents such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

Maintaining the Unit

The DVD+VCR is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn, the picture quality could be diminished.

Depending on the operating environment, regular inspection and maintenance are recommended after every 1,000 hours of use.

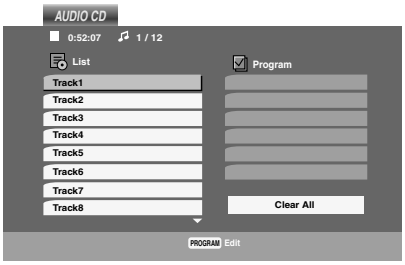
For details, please contact your nearest authorized service center.

Playing an Audio CD or MP3 Disc

The DVD+VCR can play MP3 formatted recordings on CD-ROM, CD-R, or CD-RW discs.

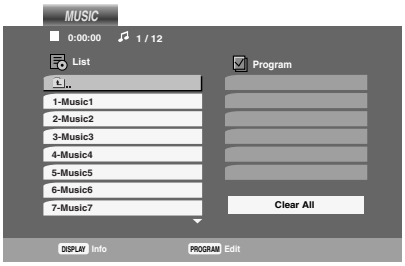
Audio CD

Once you insert an audio CD a menu appears on the TV screen. Press ▲ / ▼ to select a track then press ► or ENTER/OK and playback starts.



MP3

1. Press ▲ / ▼ to select a folder, and press ENTER/OK to see the folder contents.
2. Press ▲ / ▼ to select a track then press ► or ENTER/OK. Playback starts.



ID3 TAG

- When playing a file containing information such as track titles, you can see the information by pressing DISPLAY. [Song, Artist, Album, Comment, Genre]
- If there is no information, “No ID3 TAG” appear on the menu screen.

Tips:

- If you are in a file list on the “MUSIC” menu and want to return to the Folder list, use the ▲ / ▼ to highlight _ and press ENTER/OK.
- To go directly to any track, input the track number (0-9).
- On a CD with MP3 and JPEG you can switch MP3 and JPEG. Press TITLE and “MUSIC” or “PHOTO” word on top of the menu is highlighted.

MP3 disc compatibility with this player is limited as follows:

- Sampling frequency: within 8 - 48 kHz
- Bit rate: within 32 - 320kbps
- The player cannot read an MP3 file that has a file extension other than “.mp3”.
- CD-R physical format should be ISO 9660
- If you record MP3 files using software that cannot create a file system (eg. Direct-CD) it is impossible to playback MP3 files. We recommend that you use Easy-CD Creator, which creates an ISO 9660 file system.
- File names should have a maximum of 8 letters and must incorporate an .mp3 extension.
- They should not contain special letters such as / ? * : “ < > l etc.
- The total number of contens on the disc should be less than 1500 files and 300 folders.

This DVD player requires discs and recordings to meet certain technical standards in order to achieve optimal playback quality. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3 or WMA files) and these require certain pre-existing conditions (see above) to ensure compatible playback.

Customers should note that permission is required in order to download MP3 / WMA files and music from the Internet. Our company has no right to grant such permission. Permission should always be sought from the copyright owner.

Audio CD and MP3 Disc Features

Pause CD MP3

1. Press ❚❚ during playback.
2. To return to playback, press ► or press ❚❚ again.

Moving to another Track CD MP3

1. Press ▶▶| or |◀◀ briefly during playback to go to the next track or to return to the beginning of the current track.
2. Press |◀◀ twice in quick successions to go back to the previous track.
3. You can play any track by inputting its number.

Repeat Track / All / Off CD MP3

You can play a track/all on a disc.

1. Press REPEAT when playing a disc. The repeat icon appears.
2. Press REPEAT to select a desired repeat mode.
   - Track: repeats the current track.
   - All: repeats all the tracks on a disc.
   - Off (No display): does not play repeatedly.

Note:
If you press ▶▶| once during Repeat Track playback, the repeat playback will be cancelled.

Search CD MP3

1. Press ◄◄ or ►► during playback.
2. Press ◄◄ or ►► repeatedly to select the required speed:
   X2, X4 and X8 backward or forward.
3. To exit SEARCH mode, press ►.

Random CD MP3

1. Press RANDOM during playback. Random Playback begins immediately and “Random” appears on the menu screen.
2. To return to normal playback, press RANDOM repeatedly until “Random” disappears from the menu screen.

Tip:
By pressing ▶▶| or |◀◀ during random playback, the unit selects another track and resumes random playback.

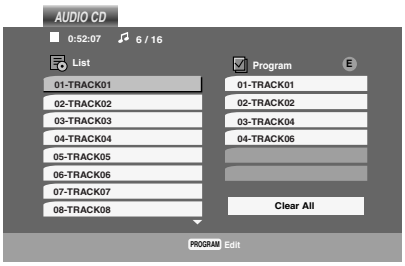
Repeat A-B CD

1. To repeat a sequence during disc playback press REPEAT A-B at your chosen starting point. The Repeat icon and “A -” appear on the menu screen.
2. Press REPEAT A-B again at your chosen end point. The Repeat icon and “A-B” appear on the menu screen, and the sequence begins to play repeatedly.
3. To exit the sequence and return to normal play, press REPEAT A-B again. The Repeat icon disappears from the menu screen.

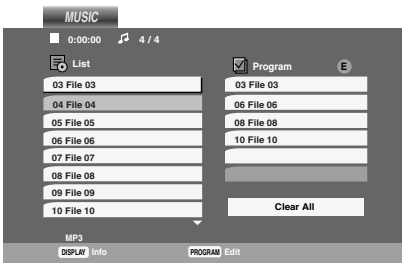
Programmed Playback

The program function enables you to store your favourite tracks from any disc in the player memory.
A program can contain 30 tracks.

1. Insert a disc.
   AUDIO CD or MUSIC menu appears.
2. Press MNL.PROG.
   The Ⓔ mark will appear to the right of the word "Program" on the right side of the menu screen.



Audio CD Program Menu



MP3 Program Menu

Note:
Press MNL.PROG. again, the Ⓔ mark will disappear to exit the Program Edit mode.

3. Select a track on the "List", then press ENTER/OK to place the selected track on the "Program" list.
   Repeat to place additional tracks on the list.
4. Press ►.
   Select the track you want to start playing in the "Program" list.
5. Press ► or ENTER/OK to start. Playback begins in the order in which you programmed the tracks.
   Playback stops after all of the tracks on the "Program" list have played once.
6. To resume normal playback from programmed playback, select a track of AUDIO CD (or MUSIC) list and then press ► or ENTER/OK.

Note:
When you play the programmed track, the Ⓔ mark will disappear then the program edit mode will disable.

Repeat Programmed Tracks

1. Press REPEAT when playing a disc. The repeat icon appears.
2. Press REPEAT to select a desired repeat mode.
   - Track: repeats the current track
   - All: repeats all the tracks on programmed list.
   - Off (No display): does not play repeatedly.

Note:
If you press ▶▶| once during Repeat Track playback, the repeat playback will be cancelled.

Erasing a Track from "Program" List

1. During STOP mode, press MNL.PROG. and Ⓔ mark will appear.
2. Use ► / ▲ / ▼ to select the track that you wish to erase from the Program list.
3. Press CLEAR (0000).
   Repeat to erase additional tracks on the list.

Erasing the Complete Program List

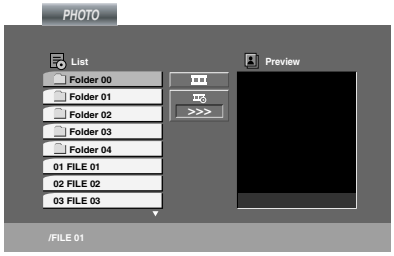
1. During STOP mode, press MNL.PROG. and Ⓔ mark will appear.
2. Use ► / ▲ / ▼ to select "Clear All" in the "Program" list, then press ENTER/OK.

Note:
The programs are also cleared when the disc is removed.

Viewing a JPEG Disc

Using this DVD+VCR you can view discs with JPEG files.

1. Insert a disc and close the tray. The PHOTO menu appears on the TV screen.



2. Press ▲ / ▼ to select a folder, and press ENTER/OK. A list of files in the folder appears. If you are in a file list and want to return to the previous Folder list, use the ▲ / ▼ buttons on the remote to highlight and press ENTER/OK.
3. If you want to view a particular file, press ▲ / ▼ to highlight a file and press ENTER/OK or ►.
   The selected file will appear for viewing.
   The on-screen messages displayed with the file can be turned off by pressing the **RETURN** (Hide) button on the remote control.
   While viewing a file, you can press ■ to move to the previous menu (PHOTO menu).

Tips:

- Information and user guidance regarding the current image is displayed in the lower part of the screen. You can toggle this bar on and off using RETURN.
- There are three Slide Speed options :
  >>> (Fast), >> (Normal) and > (Slow)
  Use ▲▼◄ ► to highlight the Speed. Then, use ◄ / ► to select the option you want to use then press ENTER/OK.
- On a disc with MP3 and JPEG you can switch MP3 and JPEG. Press TITLE and MUSIC or PHOTO word on top of the menu is highlighted.

Slide Show JPEG

Use ▲▼◄ ► to highlight the (Slide Show) then press ENTER/OK.

Still Picture JPEG

1. Press ❚❚ during slide show.
   The player will now go into PAUSE mode.
2. To return to the slide show, press ► or press ❚❚ again.

Moving to another File JPEG

Press ▶▶| or |◀◀ or cursor (◄ or ►) once while viewing a picture to advance to the next or previous file.

Zoom JPEG

Use zoom to enlarge the photo image. (see page 29)

To rotate picture JPEG

Press ▲ / ▼ during showing a picture to rotate the picture clockwise or counter clockwise.

JPEG disc compatibility with this player is limited as follows:

- Depending upon the size and number of JPEG files, it could take a long time for the DVD+VCR to read the disc's contents. If you don't see an on-screen display after several minutes, some of the files may be too large — reduce the resolution of the JPEG files to less than 5760 (Horizontal) x 4608 (Vertical) pixels and burn another disc.
- The total number of contens on the disc should be less than 1500 files and 300 folders.
- Some discs may be incompatible due to a different recording format or the condition of disc.
- Ensure that all the selected files have the ".jpg" extensions when copying into the CD layout.
- If the files have ".jpe" or ".jpeg" extensions, please rename them as ".jpg" file.
- File names without ".jpg" extension will not be able to be read by this DVD+VCR. Even though the files are shown as JPEG image files in Windows Explorer.

Language and Area Code List

Language Code List

Use this list to input your desired language for the following initial settings: Disc Audio, Disc Subtitle, Disc Menu.

Language	Code	Language	Code	Language	Code	Language	Code
Abkhazian	6566	Fiji	7074	Lingala	7678	Singhalese	8373
Afar	6565	Finnish	7073	Lithuanian	7684	Slovak	8375
Afrikaans	6570	French	7082	Macedonian	7775	Slovenian	8376
Albanian	8381	Frisian	7089	Malagasy	7771	Somali	8379
Ameharic	6577	Galician	7176	Malay	7783	Spanish	6983
Arabic	6582	Georgian	7565	Malayalam	7776	Sudanese	8385
Armenian	7289	German	6869	Maltese	7784	Swahili	8387
Assamese	6583	Greek	6976	Maori	7773	Swedish	8386
Aymara	6588	Greenlandic	7576	Marathi	7782	Tagalog	8476
Azerbaijani	6590	Guarani	7178	Moldavian	7779	Tajik	8471
Bashkir	6665	Gujarati	7185	Mongolian	7778	Tamil	8465
Basque	6985	Hausa	7265	Nauru	7865	Tatar	8484
Bengali; Bangla	6678	Hebrew	7387	Nepali	7869	Telugu	8469
Bhutani	6890	Hindi	7273	Norwegian	7879	Thai	8472
Bihari	6672	Hungarian	7285	Oriya	7982	Tibetan	6679
Breton	6682	Icelandic	7383	Panjabi	8065	Tigrinya	8473
Bulgarian	6671	Indonesian	7378	Pashto, Pushto	8083	Tonga	8479
Burmese	7789	Interlingua	7365	Persian	7065	Turkish	8482
Byelorussian	6669	Irish	7165	Polish	8076	Turkmen	8475
Cambodian	7577	Italian	7384	Portuguese	8084	Twi	8487
Catalan	6765	Japanese	7465	Quechua	8185	Ukrainian	8575
Chinese	9072	Javanese	7487	Rhaeto-Romance	8277	Urdu	8582
Corsican	6779	Kannada	7578	Rumanian	8279	Uzbek	8590
Croatian	7282	Kashmiri	7583	Russian	8285	Vietnamese	8673
Czech	6783	Kazakh	7575	Samoan	8377	Volapük	8679
Danish	6865	Kirghiz	7589	Sanskrit	8365	Welsh	6789
Dutch	7876	Korean	7579	Scots Gaelic	7168	Wolof	8779
English	6978	Kurdish	7585	Serbian	8382	Xhosa	8872
Esperanto	6979	Laothian	7679	Serbo-Croatian	8372	Yiddish	7473
Estonian	6984	Latin	7665	Shona	8378	Yoruba	8979
Faroese	7079	Latvian, Lettish	7686	Sindhi	8368	Zulu	9085

Area Code List

Choose a area code from this list.

Area	Code	Area	Code	Area	Code	Area	Code
Afghanistan	AF	Ethiopia	ET	Malaysia	MY	Saudi Arabia	SA
Argentina	AR	Fiji	FJ	Maldives	MV	Senegal	SN
Australia	AU	Finland	FI	Mexico	MX	Singapore	SG
Austria	AT	France	FR	Monaco	MC	Slovak Republic	SK
Belgium	BE	Germany	DE	Mongolia	MN	Slovenia	SI
Bhutan	BT	Great Britain	GB	Morocco	MA	South Africa	ZA
Bolivia	BO	Greece	GR	Nepal	NP	South Korea	KR
Brazil	BR	Greenland	GL	Netherlands	NL	Spain	ES
Cambodia	KH	Islands	HM	Netherlands Antilles	AN	Sri Lanka	LK
Canada	CA	Hong Kong	HK	New Zealand	NZ	Sweden	SE
Chile	CL	Hungary	HU	Nigeria	NG	Switzerland	CH
China	CN	India	IN	Norway	NO	Taiwan	TW
Colombia	CO	Indonesia	ID	Oman	OM	Thailand	TH
Congo	CG	Israel	IL	Pakistan	PK	Turkey	TR
Costa Rica	CR	Italy	IT	Panama	PA	Uganda	UG
Croatia	HR	Jamaica	JM	Paraguay	PY	Ukraine	UA
Czech Republic	CZ	Japan	JP	Philippines	PH	United States	US
Denmark	DK	Kenya	KE	Poland	PL	Uruguay	UY
Ecuador	EC	Kuwait	KW	Portugal	PT	Uzbekistan	UZ
Egypt	EG	Libya	LY	Romania	RO	Vietnam	VN
El Salvador	SV	Luxembourg	LU	Russian Federation	RU	Zimbabwe	ZW

Troubleshooting

Check the following guide for the possible cause of a problem before contacting service.

Symptom	Cause	Correction
No power.	• The power cord is disconnected.	• Plug the power cord into the wall outlet securely.
The power is on, but the DVD+VCR does not work.	• DVD or VCR button is not switched properly.	• Refer to page 5.
	• No disc is inserted. • No tape is inserted.	• Insert a disc or tape. (Check that the disc or tape indicator in the display window is lit.)
No picture.	• The TV is not set to receive DVD+VCR signal output.	• Select the appropriate video input mode on the TV so the picture from the DVD+VCR player appears on the TV screen.
	• The video cable is not connected securely.	• Connect the video cable into the jacks securely.
	• Mismatch setting between TV and this unit.	• Select the correct Video Output in SETUP menu.
	• Wrong connection.	• Check the connection.
No sound.	• The equipment connected with the audio cable is not set to receive DVD+VCR signal output.	• Select the correct input mode of the audio receiver so you can listen to the sound from the DVD+VCR.
	• The audio cables are not connected securely.	• Connect the audio cable into the jacks securely.
	• The power of the equipment connected with the audio cable is turned off.	• Turn on the equipment connected with the audio cable.
	• The AUDIO options are set to the wrong position.	• Set the AUDIO options to the correct position.
The playback picture is poor.	• The disc is dirty.	• Clean the disc.
	• The TV channels are not tuned in properly.	• Check tuning, carry out tuning again.
	• Tape heads are dirty.	• Clean video heads.
	• Tape is a rental or was recorded on another VCR.	• Use PR/TRK (▲/▼) for manual tracking adjustment while tape is playing.

Troubleshooting (Continued)

Symptom	Cause	Correction
The DVD+VCR does not start playback.	• An unplayable disc is inserted.	• Insert a playable disc. (Check the disc type and Regional code.)
	• The disc is placed upside down.	• Place the disc with the playback side down.
	• The disc is not placed within the guide.	• Place the disc on the disc tray correctly inside the guide.
	• The disc is dirty.	• Clean the disc.
	• The Rating level is set.	• Cancel the Rating function or change the rating level.
Video tape cannot be inserted.	• Is the cassette compartment empty?	• Eject the tape in.
No Hi-Fi sound	• Audio mode is not set properly.	• Select STEREO by repeatedly pressing AUDIO on the remote control.
No NICAM sound recording	• NICAM mode is not set properly.	• Make sure NICAM in the menu is set to AUTO for the station to be recorded.
The remote control does not work properly.	• There is an obstacle in the path of the remote control and this unit.	• Remove the obstacle.
	• The batteries in the remote control are exhausted.	• Replace the batteries with new ones.
	• The remote control is not pointed at the remote sensor of the DVD+VCR.	• Point the remote control at the remote sensor of the DVD+VCR.
	• The remote control is too far from the DVD+VCR.	• Operate the remote control within 23ft (7 m).
	• This remote control use the same buttons for VCR and DVD functions (ex.PLAY).	• When using a VCR, first press the VCR button. When using a DVD, first press the DVD button.
Timer recording is not possible.	• Clock in DVD+VCR is not set to correct time.	• Set clock to correct time.
	• Timer has been programmed incorrectly.	• Reprogram Timer.
	• ⏲ indicator light does not appear after programming timer.	• Reprogram Timer and turn DVD+VCR off to enable timer.

Specification

General

Power requirements	AC 200-240 V, 50 Hz
Power consumption	17 W
Dimensions (approx.)	430 X 78.5 X 265 mm (w/h/d)
Mass (approx.)	4.2 kg
Operating temperature	5°C to 35°C (41°F to 95°F)
Operating humidity	5 % to 90 %
Timer	24 hours display type
RF Modulator	UHF 22-68 (Adjustable)

System

Laser	Semiconductor laser, wavelength 650 nm
Video Head system	Double azimuth 6 heads, helical scanning.
Signal system	PAL
Frequency response	DVD (PCM 96 kHz): 8 Hz to 44 kHz DVD (PCM 48 kHz): 8 Hz to 22 kHz CD: 8 Hz to 20 kHz
Signal-to-noise ratio	More than 100 dB (ANALOG OUT connectors only)
Harmonic distortion	Less than 0.008%
Dynamic range	More than 100 dB (DVD) More than 95 dB (CD)

Inputs (VCR)

Audio	-6.0 dBm, more than 10 kohms (SCART) -6.0 dBm, more than 47 kohms (RCA)
Video	1.0 V (p-p), 75 ohms, unbalanced (SCART/RCA)

Outputs (DVD)

VIDEO OUT	1 Vp-p 75 ohms, sync negative
Audio output (digital audio)	0.5 V (p-p), 75 ohms, RCA jack x 1
Audio output (analog audio)	2.0 Vrms (1 kHz, 0 dB), 600 ohms, RCA jack (L, R) x 1/SCART (TO TV)

Outputs (VCR/DVD)

Audio	-6.0 dBm, less than 1 kohms (SCART)
Video	1.0 V (p-p), 75 ohms, unbalanced (SCART)

- Designs and specifications are subject to change without notice.

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EZ Printed in Indonesia
0305MNH-AL-OT